

REMARKS

Introduction

Applicants request favorable reconsideration and allowance of the subject application in view of the preceding amendments and the following remarks.

Claims 1-58 are pending in this application, with claims 1, 5, 21, 30, 39, and 43 being independent. Claims 1, 2, 5, 21, 30, 39, 40, and 43 have been amended herein to more clearly define the invention. These changes are supported by the original application, as filed. Therefore, no new matter has been added.

In the Office Action, claims 1 and 2 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,273,305 to Fioravanti et al. Also, claims 3-58 were variously rejected under 35 U.S.C. § 103(a) as being unpatentable over the Fioravanti et al. patent in view of one or more of U.S. Patent No. 4,612,960 to Edwards et al., U.S. Patent No. 6,010,029 to Wang, and alleged ordinary skill in the art. Applicants respectfully traverse these rejections.

Aspects of Applicants' Invention

In one aspect of the present invention, independent claim 1 recites a valve assembly including a valve housing, a valve, and a valve retainer. Among other features, the valve housing has a valve seat having a first seating surface, the valve has a top flange surface and a bottom flange surface, and the valve retainer has a valve engaging surface. The valve retainer is shaped so as to retain the valve within a tubular retaining wall and against the valve seat. At least one of (i) the first seating surface of the valve seat is for retaining the valve and is non-complementary to the top flange surface of the valve and (ii) the bottom flange surface is non-complementary to the valve engaging surface.

In another aspect, independent claim 5 recites a valve assembly including a valve housing, a valve, and a valve retainer. Among other features, the valve housing has a valve seat having (i) a first seating surface and (ii) a projection having a second seating surface, the valve has a top flange surface and a bottom flange surface, and the valve retainer has a valve engaging surface. The valve retainer is shaped so as to retain the valve within a tubular retaining wall and against the valve seat. At least one of (i) the first seating surface of the valve seat is for retaining the valve and is non-complementary to the top flange surface of the valve, (ii) the second seating surface is non-complementary to the top flange surface, and (iii) the bottom flange surface is non-complementary to the valve engaging surface.

In yet another aspect, independent claim 21 recites a lid including a cover receiving portion, a valve housing, a valve, a valve retainer, a hinge, and a cover. Among other features, the cover receiving portion has a first aperture and a second aperture and has a top side and a bottom side, the hinge is integrally formed with the cover receiving portion and is positioned such that the first aperture is on one side of the hinge and the second aperture is on an opposite side of the hinge, and the cover is attached to the cover receiving portion and includes a first sidewall and a second sidewall opposite to the first sidewall. Each of the first sidewall and the second sidewall has a protrusion extending therefrom and is shaped so as to engage one of the first aperture and the second aperture. The cover is pivotally attached to the lid via the hinge, and the cover pivots relative to the cover receiving portion so that when the protrusion on the first sidewall of the cover is pivoted toward the first aperture, the protrusion on the second sidewall of the cover simultaneously pivots away from the second aperture.

In still another aspect, independent claim 30 recites an assembly from which to drink including a container having an upper lip and a lid removably attachable to the upper lip of the container. Among other features, the lid includes (i) a substantially flat portion having a first aperture and a second aperture formed therein and a top side and a bottom side, (ii) a hinge integrally formed with the substantially flat portion and positioned such the first aperture is on

one side of the hinge and the second aperture is on an opposite side of the hinge, (iii) a valve housing, (iv) a valve, (v) a valve retainer, and (vi) a cover attached to the substantially flat portion via the hinge. The cover includes a first sidewall and a second sidewall opposite to the first sidewall. Each of the first sidewall and the second sidewall has a protrusion extending therefrom, and is shaped so as to engage one of the first aperture and the second aperture.

In further aspects, each of independent claims 39 and 43 recites an improved assembly from which to drink, including a container and a lid. The lid has (i) a first aperture and a second aperture formed therein and a top side and a bottom side, (ii) a hinge positioned so that the first aperture is on one side of the hinge and the second aperture is on an opposite side of the hinge, and (iii) an aperture cover pivoting via the hinge. The improvement of claim 39 includes at least one of (i) a first seating surface of a valve seat that is for retaining a valve and that is non-complementary to a top flange surface of the valve and (ii) a bottom flange surface that is non-complementary to a valve engaging surface. The improvement of claim 43 includes at least one of (i) a first seating surface of a valve seat that is for retaining a valve and that is non-complementary to a top flange surface of the valve, (ii) a second seating surface that is non-complementary to the top flange surface, and (iii) a bottom flange surface that is non-complementary to a valve engaging surface.

Salient Features of the Independent Claims

According to each of independent claims 1 and 39, Applicants' invention includes:

at least one of (i) a first seating surface of a valve seat that is for retaining a valve and that is non-complementary to a top flange surface of the valve and (ii) a bottom flange surface that is non-complementary to a valve engaging surface.

Further, according to each of independent claims 5 and 43, Applicants' invention includes:

at least one of (i) a first seating surface of a valve seat that is for retaining a valve and that is non-complementary to a top flange surface of the valve, (ii) a second seating surface that is non-complementary to the top flange surface, and (iii) a bottom flange surface that is non-complementary to a valve engaging surface.

Still further, according to each of independent claims 21 and 30, Applicants' invention includes:

a cover attached via a hinge to a lid, the cover having a first sidewall and a second sidewall opposite to the first sidewall, each sidewall having a protrusion extending therefrom that is shaped so as to engage one of a first aperture and a second aperture formed in the lid.

Discussion of the Cited Art

Applicants assert that at least the salient features of Applicants' invention, discussed above, are not taught or suggested by the cited art, whether that art is taken alone or in combination.

The Fioravanti et al. patent relates to valves for packaging containers and discloses a self-closing valve for a packaging container. The valve 10 has an outwardly concave valve head 22 joined to a mounting ring 20 by a flexible connecting wall 24. The connecting wall 24 has a frustoconical outer part 56 and a cylindrical inner part 57 joined together at an elbow 58. The mounting ring 20 has inclined upper and lower faces 26, 28. The upper and lower faces 26, 28 are engaged by opposed inclined surfaces of upper and lower parts 32, 34 of a housing 12, respectively, for holding the valve 10 in position. As pointed out in the Office Action, the "radially outer edges" of the inclined upper face 26 depend away from the opposed inclined surface of upper part 32. (Office Action, p. 2.) The Examiner relies only upon this to show a first seating surface that is non-complementary to a top flange surface.

However, Applicants assert that the Fioravanti et al. patent does not teach or suggest at least the salient features of independent claims 1 and 39, discussed above. In

particular, the Fioravanti et al. patent fails to teach or suggest that a first seating surface is for retaining the valve and is non-complementary to a top flange surface of the valve. Also, the Fioravanti et al. patent fails to teach or suggest any non-complementary relationship between a bottom flange surface and a valve engaging surface. For these reasons, Applicants respectfully traverse the rejection of independent claim 1 under 35 U.S.C. § 102(e) and assert that the Fioravanti et al. patent does not teach the salient features of independent claim 39. Furthermore, Applicants submit (and the Office Action concedes) that the Fioravanti et al. patent does not teach or suggest any non-complementary relationship between a second seating surface and a top flange surface, as recited in independent claims 5 and 43, or a cover attached via a hinge to a lid, the cover having a first sidewall and a second sidewall opposite to the first sidewall, as recited in independent claims 21 and 30.

Moreover, Applicants assert that the Edwards et al. patent, the Wang patent, and the reference to ordinary skill in the art do nothing to remedy the deficiencies just discussed with regard to the Fioravanti et al. patent.

The Edwards et al. patent is directed to a valve assembly for permitting relatively free flow in a first direction and for preventing flow in a second, opposite direction. According to Applicants understanding, the Edwards et al. patent is cited merely for teaching a valve seat with multiple seating surfaces. Without conceding the propriety of this characterization of the Edwards et al. patent, Applicants submit that the Edwards et al. patent fails to remedy the deficiencies discussed above with respect to the Fioravanti et al. patent. In particular, the Edwards et al. patent does not teach or suggest any of the non-complementary relationships recited in independent claims 1, 5, 39, and 43, discussed above, and it does not teach or suggest a cover attached via a hinge to a lid, the cover having a first sidewall and a second sidewall opposite to the first sidewall, as recited in independent claims 21 and 30.

The Wang patent, directed to a container lid assembly, was cited as teaching a container assembly with a container lid, cover receiving portion, hinge, and cover. Applicants

understand the Wang patent as disclosing a lid assembly for a drinking cup including (i) a stationary lid body 20 having a liquid discharge slot 25 and an air vent 261 and (ii) a rotary cap 10. The rotary cap 10 is attached, via a drive post 13, to an upper strip 50. The upper strip 50 has a sealing gasket 58 and a sealing plug 561. When the rotary cap 10 is in a first position, the sealing gasket 58 seals the liquid discharge slot 25 and the sealing plug 561 seals the air vent 261. When the rotary cap 10 is rotated to a second position, the liquid discharge slot 25 and the air vent 261 are unimpeded. Applicants submit, however, that the Wang patent fails to remedy the deficiencies noted above with respect to the Fioravanti et al. and Edwards et al. patents. In particular, the Wang patent fails to teach or suggest any of the non-complementary relationships recited in independent claims 1, 5, 39, and 43. Furthermore, Applicants do not understand the Wang patent to teach or suggest the salient features of independent claims 21 and 30, because, for example, Applicants understand the Wang patent to teach that the sealing gasket 58 and the sealing plug 561 are arranged on the same sidewall of the upper strip 50 and that the upper strip 50 is not attached via a hinge.

Thus, Applicants respectfully submit that the present invention as recited in independent claims 1, 5, 21, 30, 39, and 43 is neither taught nor suggested by the teachings of the Fioravanti et al., Edwards et al., and Wang patents, whether taken individually, or in combination. Furthermore, the Examiner has failed to cite any motivation found within the four corners of any of the Fioravanti et al., Edwards et al., and Wang patents to combine the disclosures or teachings of these patents to render obvious Applicants' invention, as claimed, for example, in independent claims 1, 5, 21, 30, 39, and 43. Even if the devices in these patents could be physically combined, the mere fact that such a combination is possible is insufficient if there is no suggestion in the art that such a combination is desirable. *See, e.g., ACS Hospital Sys. v. Montefiore Hospital*, 221 U.S.P. Q. 929, 933 (Fed. Cir. 1984) ("Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination.")

Furthermore, because at least the salient features discussed above with respect to independent claims 1, 5, 21, 30, 39, and 43 are not taught or suggested in the cited patents, Applicants traverse the Office Action's repeated assertion that one of ordinary skill in the art would have been able to "discover the optimum or workable ranges" or to "change [the] size" of features disclosed in the cited patents in order to render obvious Applicants' invention. (*See, e.g.*, Office Action, p. 3.) Specifically, because these features are not taught in the art, whether that art is taken alone or in combination, the Office Action's proposition, i.e., regarding "ranges" and "sizes," is inapposite.

Conclusion


In view of the foregoing, Applicants submit that each of independent claims 1, 5, 21, 30, 39, and 43 is patentably distinguished over the cited art, whether the art is taken alone or in combination. Moreover, Applicants assert that the claims would not have been obvious to one of ordinary skill in the art, as discussed above. Favorable reconsideration and withdrawal of the outstanding rejections are requested.

Claims 2-4, 6-20, 22-29, 31-38, 40-42, and 44-58 each depend from one of the independent claims. Applicants submit that each of these claims also should be deemed allowable, in their own right, for defining other patentable features of the present invention in addition to those recited in their respective independent claims. Further individual consideration of each dependent claim is requested.

Applicants submit that this application is in condition for allowance. Favorable reconsideration, withdrawal of the rejections set forth in the above-noted Office Action, and early passage to issue are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to the address given below for S.C. Johnson & Son, Inc.

Respectfully submitted,


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